

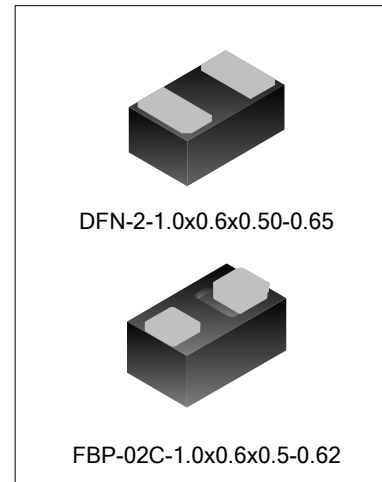
Single Channel Voltage Stabilized Transient Voltage Suppressor

General Description

GG2075FNG/FBG is the single channel voltage-stabilized transient voltage suppressor. It features high ESD, low leakage, fast response, and excellent voltage clamping capability.

Features

- Single array ESD protection structure
- Provides ESD protection to IEC61000-4-2(ESD):
 - $\pm 30\text{kV}$ (air discharge)
 - $\pm 30\text{kV}$ (contact discharge)
- Low clamping voltage
- Low operating voltage: 5V
- Reliable Silicon avalanche breakdown structure
- Small DFN1006 package



Applications

- * Mobile phone accessories;
- * Portable computer;
- * Digital Camera;
- * MP3/MP4/PMP.

Pin Configuration



Absolute Maximum Ratings

Characteristics		Symbol	Rating	Unit
Peak Pulse Power (8/20 μ s)		P _{PP}	107	W
Peak Pulse Current (8/20 μ s)		I _{PP}	8.7	A
Maximum ESD	IEC61000-4-2 (Air)	V _{ESD1}	\pm 30	kV
Withstand Capability	IEC61000-4-2 (Contact)	V _{ESD2}	\pm 30	kV
Operating Temperature Range		T _{opr}	-55 ~ +125	$^{\circ}$ C
Storage Temperature Range		T _{stg}	-55 ~ +150	$^{\circ}$ C

Electrical Characteristics (T_{amb}=25 $^{\circ}$ C)

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Working Voltage	V _{RWM}		--	--	5	V
Reverse Breakdown Voltage	V _{BR}	I _t =1mA	6.2	--	--	V
Reverse Leakage Current	I _R	V _{RWM} =5V; T=25 $^{\circ}$ C	--	--	1	μ A
Negative Clamping Voltage	V _{C1}	I _{PP} =8.7A, t _P =8/20 μ S	--	--	12.3	V
Capacitance	C _{J2}	V _R =0V, f=1MHz	--	--	65	pF

Typical Characteristics

Fig.1. ESD clamp voltage
Positive 8kV IEC61000-4-2 contact discharge

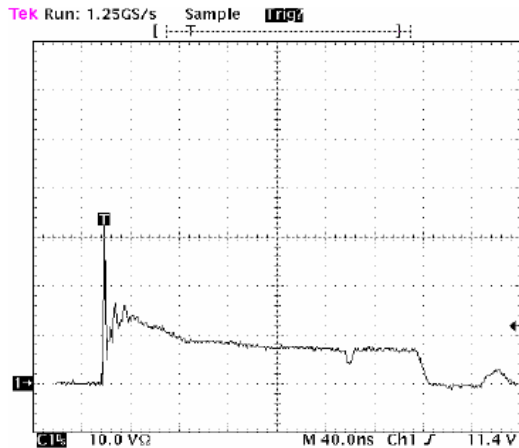


Fig. 2. ESD clamp voltage
Negative 8kV IEC61000-4-2 contact discharge

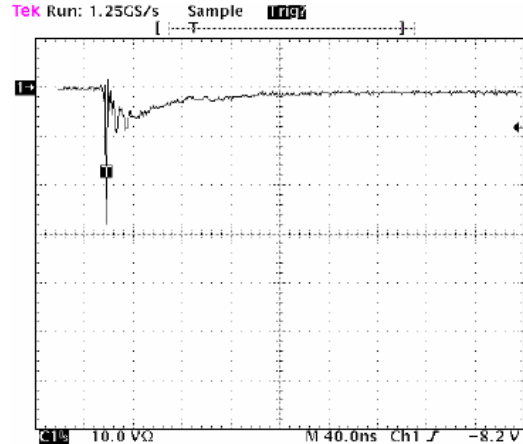
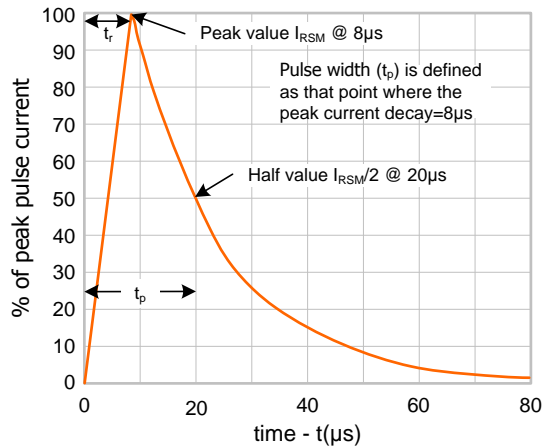


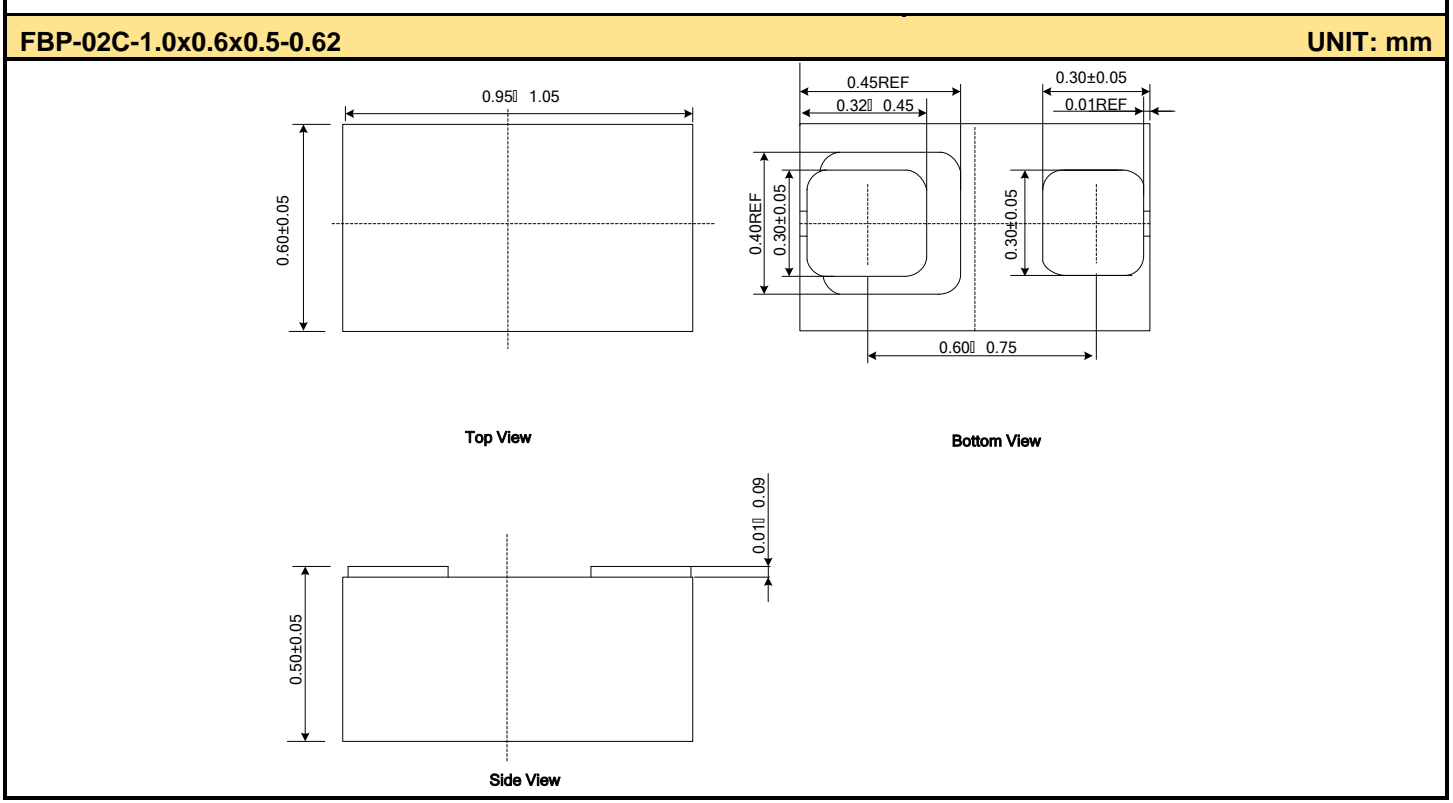
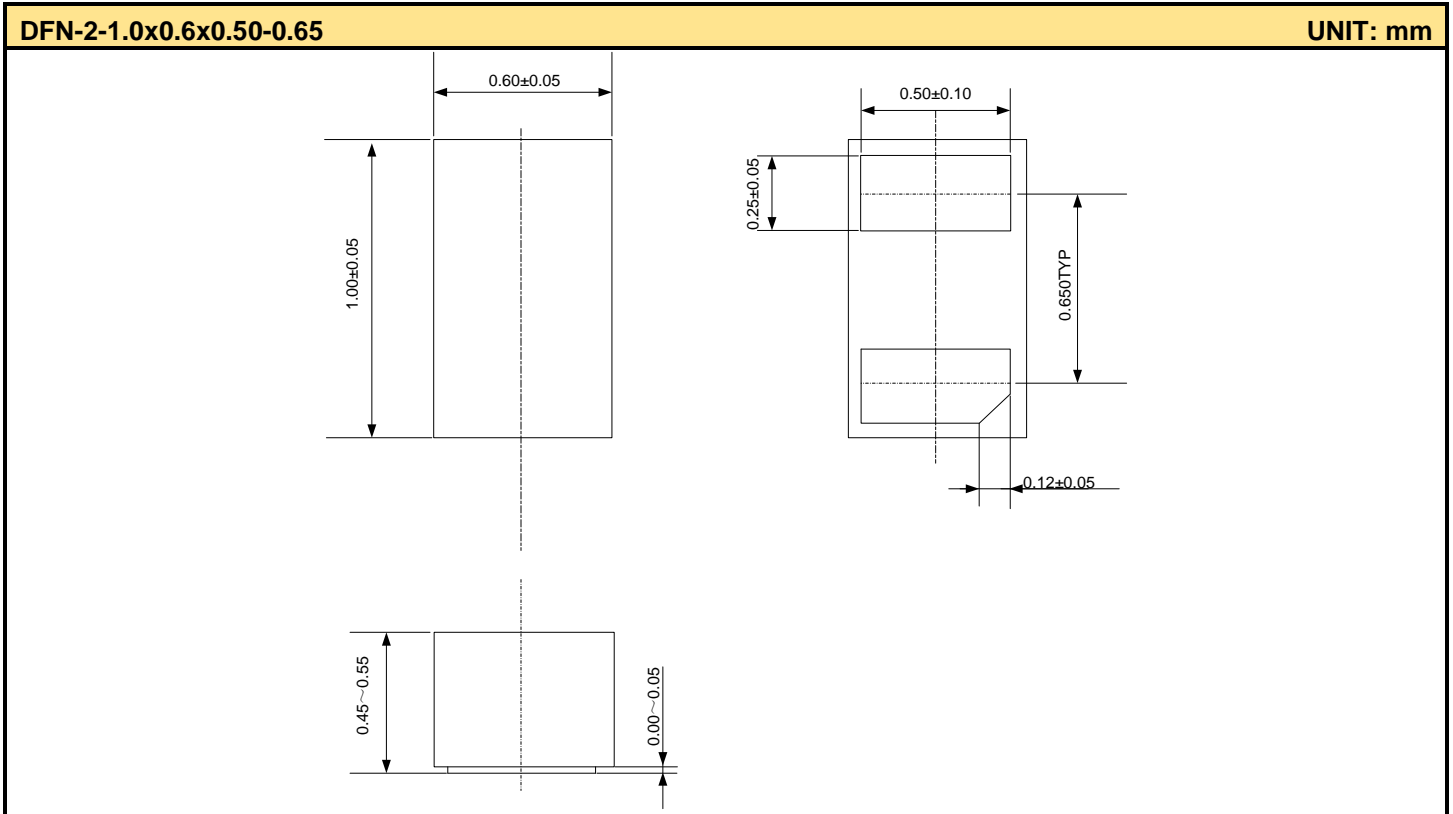
Fig.3. 8X20μs pulse waveform



Ordering Information

Part No.	Package	Marking	Material	Packing
GG2075FNGTR	DFN-2-1.0x0.6x0.50-0.65	B	Halogen free	Tape&Reel
GG2075FBGTR	FBP-02C-1.0x0.6x0.5-0.62	B	Halogen free	Tape&Reel

Package Outline



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